Remarks/Arguments

Reconsideration of this application is requested.

Claim Status

Claims 1-3 are pending. Since no claims are added, amended or canceled, no listing of claims under 37 CFR 1.121 is required.

Claim Rejections – 35 USC 103(a)

Claims 1-3 are rejected under 35 USC 103(a) as obvious over Proctor (US 6,925,070) in view of Choi (US 6,963,540). In response, applicant traverses the rejections.

Claim 1

Claim 1 recites a wireless telecommunication system that allows mixed use of at least one first wireless communication terminal that delivers packets by using one frequency channel (i.e., a single carrier terminal) and at least one second wireless communication terminal that delivers packets by using a plurality of frequency channels simultaneously (i.e., a multiple carrier terminal).

As further recited in claim 1, the single carrier (first) terminal switches a plurality of frequency channels to receive a preamble signal of the switched frequency channel, thereby making it possible to detect a time slot allocated to the single carrier terminal itself in the switched frequency channel. With such a structure, the single carrier terminal of claim 1 can dynamically change the plurality of frequency channels with used frequency channels not being static, thereby improving the utilization efficiency of frequencies.

Moreover, unlike the multiple carrier (second) terminal, the single carrier (first) terminal cannot receive data via the plurality of frequency channels simultaneously. Therefore, the wireless base station recited in claim 1 transmits nonsimultaneously a preamble signal for each of the plurality of frequency channels so that the single carrier terminal can receive the preamble signal for each of the frequency channels. Thus, the single carrier terminal can receive the preamble signal for each of the frequency channels.

Proctor, by contrast, discloses a multiple carrier terminal (i.e., an access unit) by which one user uses multiple channels simultaneously (see, e.g., FIG. 4 and col. 11, line 25 to col. 12, line 10). However, Proctor does not disclose or suggest mixed use of a multiple carrier terminal (access unit) and a single carrier terminal. Moreover, Proctor does not disclose or suggest that a single carrier terminal dynamically changes a plurality of channels with used frequency channels not being static to improve the utilization efficiency of frequencies.

Therefore, Proctor does not disclose or suggest, as recited in claim 1:

> *...the wireless base station sets a preamble signal in the time slots for indicating one of the terminals to which the time slots are allocated, and transmits nonsimultaneously the preamble signal for the plurality of frequency channels; and*
>
> *the first wireless communication terminal receives the preamble signal by switching the plurality of frequency channels transmitted from the base station, and detects the time slot to be received based on the received preamble signal.*

Moreover, Proctor does recognize the problem that is solved by applicant's invention of claim 1, or realize the advantageous effects of the invention. Choi does not remedy the deficiencies of Proctor. Accordingly, claim 1 is not obvious over Proctor in view of Choi, and the rejections under 35 USC 103(a) should be withdrawn.

Claim 2

Claim 2, in similar fashion to claim 1, recites a wireless base station that transmits information using a plurality of frequency channels formed by a plurality of time slots and having:

> *...an information setting unit that sets a preamble signal in the time slots for indicating the terminals to which the time slots are allocated; and*

> *a transmission unit that transmits nonsimultaneously the preamble signal for the plurality of frequency channels.*

As discussed above, such features are not disclosed or suggested by Proctor or Choi. Accordingly, claim 2 is not obvious over Proctor in view of Choi, and the rejections under 35 USC 103(a) should be withdrawn.

Claim 3

Claim 3 recites a wireless communication terminal that delivers packets using one frequency channel formed by a plurality of timeslots, wherein:

> *...a preamble signal in the time slots being set for indicating the terminals to which the time slots are allocated...*

and having:

> *...a reception unit that receives the preamble signal by switching the plurality of frequency channels transmitted to the base station; and*
>
> *a detection unit that detects the time slot to be received based on the received preamble signal.*

The deficiencies of Proctor with respect to these limitations were discussed above with respect to claim 1. Choi discloses that user equipment (UE) transmits an access preamble (AP). However, claim 3 recites that a wireless communication terminal receives a preamble signal. Moreover, in Choi, a UMTS Terrestrial Radio Access Network (UTRAN) transmits an ACK signal in response to the access preamble transmitted by the user equipment. In claim 3, by contrast, the preamble signal is transmitted from a base station.

Accordingly, since Proctor and Choi do not disclose or suggest each and every feature of claim 3, claim 3 is not obvious over Proctor and Choi. The rejections under 35 USC 103(a) should accordingly be withdrawn.

Conclusion

This application is believed to be in condition for allowance. The Examiner is invited to contact the undersigned to resolve any issues that remain after consideration of this reply. Any fees due with this response may be charged to our Deposit Account No. 50-1314.

Respectfully submitted,
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